

## ABSTRACT

A double-sided double-layer optical disc for storing digital programs, such as a DVD-18 disc, is formed with data tracks on each layer. The tracks on one side are oriented along one spiral while the tracks on the other side are oriented along a different spiral, the two spirals being oriented in opposite directions as viewed from the respective sides, so that they are mirror images of each other. This allows data to be read by a player seamlessly from both sides of the disc without changing the direction of rotation of the disc while normal data reading is proceeding. A disc writer is provided with two heads that are arranged to write data on the respective sides of a disc. The two heads write data streams sequentially or simultaneously.